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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,587	03/20/2001	Yasushi Sakai	108075-00051	9316

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EXAMINER

NG, CHRISTINE Y

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 10/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	Application No. 09/811,587	Applicant(s) SAKAI, YASUSHI	
	Examiner Christine Ng	Art Unit 2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-14 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
6) <input type="checkbox"/> Other: _____. |
|--|--|

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,436,617 to Adams et al.

Referring to claim 1, Adams et al disclose in Figure 1 a method for controlling data transmission in a network system configured by a plurality of nodes including a first node (MPR-A), a second node (terminal 0001), and a third node (any of terminals 0011-1010), wherein the first node (MPR-A) has a plurality of ports (ports 1-6) including a first port (port 1) connected to the second node (terminal 0001) and a second port (any of ports 2-6) connected to the third node (any of terminals 0011-1010), and the first node (MPR-A) enables data received by the first port (port 1) from the second node (terminal station 0001) to be transmitted from the second port (any of ports 2-6) to the third node (any of terminals 0011-1010), and wherein each node has address information (Column 1, lines 29-32), the received data including the address information (Figure 1A, bytes 63-79) of the node to which the received data is addressed. Refer to Column 4, line 51 to Column 5, line 2 and Column 6, lines 26-42. The method comprises the steps of:

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Comparing the address information of the first node (MPR-A) with the address information included in the received data (Figure 1A). Refer to Column 5, lines 57-66 and Column 6, lines 26-42.

Temporarily disconnecting the third node (any of terminals 0011-1010) from the first node (MPR-A) when the received data (Figure 1A) is not addressed to the third node. Refer to Column 5, lines 57-66 and Column 6, lines 26-42.

Referring to claim 2, Adams et al disclose that temporarily disconnecting includes dividing the network system into a plurality of sub-network systems (transmitting/receiving ports and all other ports), and wherein the method further comprises permitting data transmission within each of the sub-network systems. The first sub-network is the transmitting and receiving ports performing data transmission between each other. The second sub-network is all other ports that are set to an idle state (0) which also perform data transmission amongst each other. Refer to Column 3, lines 12-18; Column 3, lines 45-53 and Column 6, lines 38-42.

Referring to claim 3, Adams et al disclose that the disconnecting step includes idling the second port (any of ports 2-6). The ports that are not the destination port are set to an idle state of (0). Refer to Column 1, lines 12-13; Column 5, lines 57-66 and Column 6, lines 38-42.

Referring to claim 4, Adams et al discloses in Figure 1 that the method further comprises the steps of:

Monitoring data transmission at each port (ports 1-6). Refer to Column 3, lines 54-58.

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Idling (returning ports to an idle state (0)) all of the ports (ports 1-6) when data transmission is completed at all of the ports. Refer to Column 3, lines 54-58.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-8 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,436,617 to Adams et al.

Referring to claim 5, Adams et al disclose in Figures 1 and 2 a data transmission controller comprising:

[Figure 1] A plurality of ports including a first port (port 1) connected to a first node (terminal 0001) and a second port (any of ports 2-6) connected to a second node (any of terminals 0011-1010). Refer to Column 4, lines 51-62.

[Figure 2] A network information memory (memory 13) for storing node information (Table 1) of first (terminal 0001) and second (any of terminals 0011-1010) nodes. Refer to Column 5, lines 41-55.

[Figure 2] A packet determiner (comparator/reader 11) connected to the first (port 1) and second (any of ports 2-6) ports and network information memory (memory 13) for determining with the node information an addressee of data

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received by the first port (port 1) from the first node (terminal station 0001).

Refer to Column 5, lines 57-66 and Column 6, lines 26-42.

[Figure 2] An interface control circuit (switch controller 14) connected to the packet determiner (comparator/reader 11) to temporarily disconnect the second port (any of ports 2-6) when the data is not addressed to the second node (any of terminals 0011-1010). Refer to Column 5, lines 57-66 and Column 6, lines 26-42.

Adams et al do not disclose disconnecting the second node from the second port when the data is not addressed to the second node. However, Adams et al disclose disconnecting a port when it is not connected to the node that is being addressed. Refer to Column 5, lines 57-66. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include disconnecting the node from the port when the data is not addressed to the node, the motivation being that the port connects the node to the network; disconnecting the port prevents the node from accessing the network.

Referring to claim 6, Adams et al disclose in Figure 2 that the interface control circuit (switch controller 14) permits data transmission within a sub-network system including the second node (any of terminals 0011-1010). All other ports, besides the transmitting and receiving ports, are disconnected "but connected to each other and returned to the (0) state to allow one or more than one further iteration..." (Column 3, lines 45-53).

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Referring to claim 7, Adams et al disclose in Figure 2 that the data transmission controller further comprises a plurality of interfaces (cross-point switch 9) respectively connected between the ports (ports 7) and the interface control circuit (switch controller 14), wherein the interface control circuit (switch controller 14) controls the interface (cross-point switch 9) associated with the second port (any of ports 2-6) to idle the second port and temporarily terminates the connection between the second port and the second node (any of terminals 0011-1010). Refer to Column 6, lines 26-42.

Referring to claim 8, Adams et al discloses in Figure 2 that the interface control circuit (switch controller 14) monitors data transmission at the ports (ports 1-6) and idles (returning ports to an idle state (0)) all of the ports after data transmission is completed at the ports. Refer to Column 5, lines 54-58.

Referring to claim 10, Adams et al disclose in Figure 1 a data transmission controller incorporated in first node (MPR-A) for enabling data received by first port (port 1) from a second node (terminal 0001) to be transmitted by a second port (any of ports 2-6) to a third node (any of terminals 0011-1010), wherein the data includes packet information containing a data origination address (Figure 1A, bytes 79-95) and a data destination address (Figure 1A, bytes 63-79). Refer to Column 4, lines 51 to Column 5, line 2. The data transmission controller (Figure 2) comprises:

A first interface (cross-point switch 9) connected to first port (port 1).

A second interface (cross-point switch 9) connected to the second port (any of ports 2-6).

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A network information memory (memory 13) for storing first address information of the first node (MPR-A), second address information of the second node (terminal 0001), and third address information of the third node (any of terminals 0011-1010). Refer to Column 5, lines 18-44.

A packet determiner (comparator/reader 11) connected to the first and second interfaces (cross-point switch 9) for comparing the data destination address (Figure 1A, bytes 63-79) with the second and third address information to determine an addressee of the received data (Figure 1A). Refer to Column 5, lines 57-66.

An interface control circuit (switch controller 14) connected to the first and second interfaces (cross-point switch 9), the packet determiner (comparator/reader 11), and the network information memory (memory 13) for controlling the first and second interfaces (cross-point switch 9), wherein the interface control circuit (switch controller 14) processes the data when the data is addressed to the first node (MPR-A), transmits the data to the third node (any of terminals 0011-1010) from the second port (any of ports 2-6) when the data is addressed to the third node, and controls the second interface (cross-point switch 9) when the data is not addressed the third node to idle second port and disconnect the second port to stop data transmission by the second port the third node. Refer to Column 5, lines 57-66 and Column 6, lines 26-42.

Adams et al do not disclose disconnecting the third node from the second port when the data is not addressed to the third node. Refer to the rejection of claim 5.

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Referring to claim 11, Adams et al disclose that the interface control circuit (switch controller 14) permits data transmission within a first sub-network system including the third node (any of terminals 0011-1010). All other ports, besides the transmitting and receiving ports, are disconnected "but connected to each other and returned to the (0) state to allow one or more than one further iteration..." (Column 3, lines 45-53).

Referring to claim 12, Adams et al disclose that the first node (MPR-A) and the second node (terminal 0001) configure a second network system, and wherein the interface control circuit (switch controller 14) permits independent data transmission in each of the first and second sub-network systems when the second port (any of ports 2-6) is idle. The first sub-network is the transmitting and receiving ports performing data transmission between each other. The second sub-network is all other ports that are set in idle state (0) which also perform data transmission amongst each other. Refer to Column 3, lines 12-18; Column 3, lines 45-53 and Column 6, lines 38-42.

Referring to claim 13, Adams et al disclose that the interface control circuit (switch controller 14) idles (returning ports to an idle state (0)) the first (port 1) and second (any of ports 2-6) ports when data transmission in the first and second sub-network systems is completed. Refer to Column 5, lines 54-58.

Referring to claim 14, refer to the rejections of claims 1, 5 and 10-12.

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Allowable Subject Matter


5. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Ng whose telephone number is (571) 272-3124. The examiner can normally be reached on M-F; 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. Ng 
October 20, 2004



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